

603/3

HAZARDOUS MATERIALS AND WASTE MANAGEMENT DIVISION

222 S. 6th Street, Room 232
Grand Junction, Colorado 81501-2768
Phone (303) 248-7164
Fax (303) 248-7198

501-2768 EC&G
ROCKY FLATS PLANT
CORRESPONDENCE CONTROL

Colorado Department
of Public Health
and Environment

February 28, 1995

Mr. Steve Slaten
U.S. Department of Energy
Rocky Flats Office
P.O. Box 928
Golden CO 80402-0928

ADMIN RECORD

RE: Exposure Scenarios at RFETS

Dear Mr. Slaten,

The attached page contains comments by the Colorado Department of Public Health and Environment with regard to several exposure scenarios. These comments are the result of recent meetings among the three parties which pertained to OUs 2 and 5 in particular, but which have site-wide implications.

Please contact myself at 692-3356 or Carl Spreng at 692-3358 if you have any questions about these items.

Sincerely,

Joe Schiefel

Joe Schieffelin
Rocky Flats IAG Unit Leader
Facilities Section
Hazardous Waste Control Program

cc: Scott Grace, DOE
Kurt Muenchow, DOE
Norma Castaneda, DOE
~~Winn Chromec, EG&G~~
Rick Roberts, EG&G
Martin Hestmark, EPA
Steve Tarlton, CDPHE-OE
Laura Perault, AGO

DOCUMENT CLASSIFICATION
REVIEW WAIVER PER
CLASSIFICATION OFFICE

ewed for Addressee
rres. Control RFP

7-95 *jo*
SITE BY

ORDER # 5400.1

A-OU03-000443

EXPOSURE SCENARIOS AT RFETS

Comments by the Colorado Department of Public Health and Environment (2/28/95)

1. All offsite scenarios:
 - 1) Assess risk to offsite receptors for OU3
 - 2) Risk assessments of offsite scenarios will not be required for other OUs (except for OU2 where offsite scenarios have already been assessed)
 - 3) Document cumulative effects to offsite receptors in the Comprehensive Risk Assessment.
2. A Recreational Use scenario will be defined, developed, and included as part of risk assessments performed for OUs outside the industrialized area. This scenario is favored by the Future Site Use Working Group for most of RFETS and should be more conservative than the ecological worker scenario.
3. Based on use maps developed by the FSUWG, the Gravel Miner scenario should be dropped for all OUs. OU11 may need to assess a trespasser pathway for contact with gravel pit waters and subsurface soils.
4. On-site Residential Scenarios:

Performing a Conservative Risk Screen for a site represents a first cut at assessing risk. It does not completely accomplish an assessment of risk to potential on-site residents, but is, by definition, only a risk screen. Nevertheless, when a Baseline Risk Assessment (BRA) is conducted, CDPHE will not require that an on-site residential exposure scenario be included. However, if a residential exposure scenario is not considered in the BRA, our collective ability to manage risk will be limited due to a gap in the risk range that has been evaluated. The following advantages are accomplished by evaluating the risk to future residential receptors in the BRA:

 - 1) If a remedy is selected that does not attain unrestricted use cleanup levels, it is very important for the risk managers and the public to understand what risk is being institutionalized. For example, IA IHSSs that are only remediated to industrial exposure levels institutionalize some level of contamination that would, if allowed to, present unacceptable levels of risk of residents. This risk must be controlled through some type of institutional management technique.
 - 2) Performing a residential risk assessment creates another piece of information that may allow cleanup to a level such that the site can leave regulatory control rather than be controlled institutionally. For many IHSSs, remediation to unrestricted use levels may be attainable for little or no incremental cost above that budgeted for remediation that will occur anyway.
 - 3) As outlined in the HHRA Template, IHSSs that already meet residential risk levels as calculated by the conservative screen of 10^{-6} for carcinogens and a hazard quotient of 1.0 for noncarcinogens can become immediate candidates for a No-Further-Action ROD/CAD, pending evaluation of ARARs and dermal exposure. However, a No-Further-Action decision may also be justified, without a need for institutional controls, if a BRA for future residents is performed to show that a particular site does not present unacceptable risk even though the ratio sum from the conservative screen exceeds 1.0.